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(51) International classification	:H02M0001000000, H02M0003070000, H02M0003158000, B60L0058200000, H02M0003335000	(71)Name of Applicant : 1)Satya Institute of Technology and Management Address of Applicant :Kondakarakam, Gajularega, Vizianagaram, Andhra Pradesh, India – 535001. ----- -- 2)Agrayana Electric Technologies Pvt.Ltd Name of Applicant : NA Address of Applicant : NA
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(57) Abstract :

ABSTRACT: Title: DC-DC High Gain Cluster Converter The present disclosure proposes a DC-DC high gain cluster converter that aids to reduce the size of the converter and provides high voltage conversion ratio. The DC-DC high gain cluster converter circuit comprises a first switched-inductor circuit 102, a second switched-inductor circuit 104 and a pair of main switches 106a and 106b. The proposed DC-DC converter provides high gain and reduces the size of magnetic components. The proposed high gain DC-DC converter topology achieves high voltage conversion with low duty cycle. The proposed non-isolating DC-DC high gain converter operates as transformer-less converter and avoids electromagnetic interference and electromagnetic compatibility effects. The proposed efficient high gain DC-DC converter reduces the size of magnetic components. The proposed high gain DC-DC converter reduces current stress of inductors and reduces voltage stress of switches.

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